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OFFICE OF THE
REGIONAL ADMINISTRATOR

September 29, 2014

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE, Room 1A
Washington, DC 20426

RE: Algonquin Incremental Market Project (AIM Project), FERC Docket No. CP14-96-000, CEQ # 20140223

Dear Secretary Bose:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), and Section 309 of the Clean Air Act, we have reviewed the Draft Environmental Impact Statement (DEIS) for Algonquin's Incremental Market gas pipeline and related facilities in New York, Connecticut, Rhode Island and Massachusetts.

According to the DEIS, the purpose of the Algonquin project "is to expand its existing pipeline system from an interconnection at Ramapo, New York to deliver up to 342,000 dekatherms per day of natural gas transportation service to the Connecticut, Rhode Island, and Massachusetts markets." The DEIS explains that the overall goals of the project are to increase pipeline capacity to meet growth demands, eliminate capacity constraints, increase competition and to reduce compressor station emissions through the installation of more efficient units.

The proposed Algonquin project includes construction and operation of 37.6 miles of natural gas pipeline and associated infrastructure in New York, Connecticut, Rhode Island and Massachusetts. Seventy percent of the work entails replacement of existing pipelines with larger capacity pipe, and the balance of the work is associated with the installation of new pipeline including a new mainline, a loop and a lateral. The project also includes upgrades to existing compressor stations in New York, Connecticut, and Rhode Island.

The majority of the proposed project entails replacement of an existing pipeline with larger pipe to increase capacity. EPA's experience with other natural gas pipeline projects in the New York and New England region helped shape our active participation in the Federal Energy Regulatory Commission's (FERC) prefiling process for this project. As a cooperating agency during the preparation of the DEIS we offered detailed scoping comments on the project in 2013 and comments on the interagency review draft of FERC's Administrative Draft Environmental Impact Statement (ADEIS).

Our scoping comments focused on impacts to wetlands, drinking water, groundwater supply, and air quality (during construction and operation of the pipeline). Our comments also made specific recommendations with respect to the consideration of environmental justice, children's health, and indirect and cumulative issues in the DEIS.

While a number of EPA's pre-DEIS comments have been addressed in the DEIS, in several areas, as described more fully in the attachment to this letter, we note that information relevant to the characterization of environmental impacts is not included. Instead there are numerous FERC recommendations to Algonquin to provide information prior to the close of the DEIS comment period. While we appreciate that FERC has requested the information as part of the NEPA analysis, in many instances we believe that the information should have been included in the DEIS and not made available for the first time in the FEIS. A comprehensive response from Algonquin will likely require close coordination with state and federal cooperating agencies. We believe FERC should develop a mechanism to share the relevant information with the public and cooperating agencies in advance of the FEIS. Depending upon the nature of the relevant information provided, we may need to supplement our comments on the DEIS in response.

The enclosure to this letter describes issues and questions related to a number of elements of the proposed project and the environmental analysis (as noted above) that we believe need to be addressed in the FEIS. We have rated the DEIS "EC-2" (Environmental Concerns-Insufficient Information) in accordance with EPA's national rating system, a description of which is enclosed. My staff is ready to continue to participate on the cooperating agency team to provide additional input, as necessary, to help FERC develop the FEIS for the project. Please feel free to contact me or Timothy Timmermann of the Office of Environmental Review at 617/918-1025 if you wish to discuss these comments further.

Sincerely,

H. Curtis Spalding
Regional Administrator

Enclosure

Summary of Rating Definitions and Follow-up Action

Environmental Impact of the Action

LO--Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections
The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate
EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information
The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

Detailed Comments – Algonquin Incremental Market Project DEIS

Wetland Issues

Characterization of Impacts

The use of the term "temporary impacts" in the DEIS is unclear. In Section 4.0 (pg. 4-1), the DEIS categorizes impacts into four types: temporary, short-term, long-term, and permanent. Specifically, the DEIS defines these types of impacts as follows:

"Temporary impacts generally occur during construction with the resource returning to preconstruction condition almost immediately afterward. Short-term impacts could continue for up to 3 years following construction. Impacts were considered long-term if the resource would require more than 3 years to recover. A permanent impact could occur as a result of any activity that modified a resource to the extent that it would not return to preconstruction conditions during the life of the project…."

However, elsewhere in the DEIS, wetlands impacts are described as "temporary," despite the fact that preconstruction conditions would not be achieved immediately after construction. For example, in the case of impacts to forested wetlands that are allowed to naturally restore themselves, the preconstruction condition would take 30 - 50 years or more to achieve. Also, backfilling of pipe trenches within wetlands are considered permanent, rather than temporary, impacts. The terminology used in the FEIS should be clarified and made more consistent, to distinguish between these kinds of long term temporal impacts and shorter term temporary impacts. Furthermore, the FEIS should indicate that compensatory mitigation will be required to address various temporary impacts associated with the project, including temporal impacts.

Section 4.4.3.1 states that the project would not result in any permanent loss of wetlands and that no wetlands would be filled in Connecticut. These statements should be corrected to reflect that there will be permanent direct and secondary impacts (i.e., losses of wetland functions and services) due to the construction and operation of the project. The FEIS should clarify that backfill over new pipeline alignments in wetlands or waters of the U. S. is considered a permanent direct impact. Also, permanent conversion of one type of wetland to another type is a permanent secondary impact.

The DEIS categorizes wetland impacts (Section 4.4.3, including Table 4.4.3-1) as total wetland impacts or forested wetland impacts. These should be clarified and further categorized by type of impact (direct or secondary, permanent or temporary), and wetland type (e.g., scrub/shrub wetland impacts, emergent wetland impacts, vernal pool impacts). We note that the July 31, 2014 Corps letter to Algonquin Gas Transmission, Inc. providing preliminary comments on AIM's Clean Water Act (CWA) Section 404 application made several suggestions for the characterization of the different types of wetland impacts associated with the project. We generally concur with the approach outlined by the U.S. Army Corps of Engineers (Corps) in their letter. Furthermore, additional detail should be provided on the types and amounts of secondary impacts associated with construction and operation of the project, and the proposed mitigation for those secondary impacts.

The DEIS should more clearly explain the methodology for the calculation of wetland impacts. Impacts considered appear to be limited to the edge-to-edge crossing areas of wetlands and streams, and direct impacts to vernal pools. Additional secondary impacts should be considered and factored into the assessment of project impacts. These kinds of secondary impacts include, but are not limited to: impacts to riparian buffer and forest canopy over stream channels; impacts associated with stream bank stabilization; clearing or other construction activities within vernal pool critical terrestrial habitat (i.e., the habitat zone surrounding the vernal pool); alteration of ground or surface water flow patterns; invasive species; and, forest fragmentation and edge effects of new pipeline construction and operation.

The DEIS indicates that Algonquin will use existing access roads, including 27 temporary access roads (TAR) and 8 permanent access roads (PAR). The DEIS notes that several of these roads will need to be upgraded, including widening and vegetative clearing and the access road improvements will require 1.9 acres of "new land disturbance." The FEIS should clarify whether any of these access road improvements will involve disturbance in or adjacent to wetlands or waters of the U. S., involve and direct or secondary impacts to wetlands or waters of the U.S., and whether the described vegetative clearing would occur within or adjacent to wetlands or waters of the U.S.

Vernal Pools

With respect to vernal pools, in addition to a more detailed description and consideration of the secondary impacts associated with clearing and other construction activities in the critical terrestrial zone surrounding the pools (such as the development or use of access roads), the FEIS should better identify and clarify the locations of vernal pool resources impacted by the project. For example, in Section 4.4.3.2. (pg. 4-62 through 4-64), the DEIS states that only two vernal pools would be directly impacted by the project, and that both of these pools are located in New York. However, based on EPA's preliminary review of the CWA Section 404 permit application for the project, it appears that at least one vernal pool in Connecticut (A13-ELR-VP90) would be directly impacted. Several other vernal pools would be subject to secondary impacts from the project. A more thorough examination of likely vernal pool and other aquatic resource impacts should be incorporated into the FEIS, and inconsistencies between the DEIS and CWA Section 404 application information be rectified.

Impact Avoidance

Of the 108 stream crossings required by the construction of the project, Horizontal Directional Drilling (HDD) is proposed for only two crossings: the Hudson River and the Still River. The FEIS should provide more information on whether and how HDD was considered for other stream crossings to reduce impacts, and why it is proposed only for these two river crossings. Other stream crossings, including but not limited to Susquetonscut Brook and Mother Brook, could be appropriate locations for HDD.

ROW Vegetation Maintenance in Wetlands

The DEIS provides a general description of the vegetation maintenance plan/practices to be implemented in wetland areas within the ROW. We strongly recommend that FERC work with the Corps and EPA to develop a long term monitoring program to determine if vegetation

management within wetland areas in the ROW is being conducted in a manner consistent with the approach described in the DEIS. This type of documentation is appropriate given the loss of wetland structure and function associated with pipeline construction and operation through wetland areas. The vegetation management approach described in the DEIS is generally consistent with that utilized for other projects but it is not clear whether or not the proposed measures have been effectively implemented by the applicant for other projects. We believe that the development of a vegetation monitoring protocol is warranted and that FERC should work to confirm that the approach recommended by the applicant is actually implemented over the long term.

Mitigation

The DEIS discussion of compensatory wetland mitigation focuses on permanent conversion of Palustrine Forested (PFO) wetland to other types. Additional mitigation measures should be identified to address all types of secondary impacts resulting from the project, such as the types of secondary impacts discussed above. Also, temporal impacts - the loss of ecological functions and services over the period of time that it takes for the impacted area to naturally restore itself - should be addressed in the mitigation plan. An appropriate mitigation plan should adequately address all permanent and temporary direct, secondary and cumulative impacts associated with the project.

The DEIS (pg. 4-61) identifies measures that would be implemented to mitigate unavoidable construction related impacts on wetlands. One of the included measures is "using low ground weight equipment or operating equipment on timber riprap, prefabricated equipment mats or terra mats on saturated soils or where standing water is present." While EPA concurs with these types of measures to reduce impacts, it is not clear whether the DEIS included the placement of temporary construction mats, etc., as an impact in the assessment of secondary impacts.

EPA agrees with the Algonquin commitment to provide on-site restoration of temporarily impacted PFO wetlands to pre-construction condition as mitigation for the entire project and we concur with the FEIS statement that "...additional compensation may be necessary for temporal loss of aquatic habitat function associated with the discharge of temporary fill and secondary project impacts." Furthermore, returning wetland contours and drainage patterns to their preconstruction configurations is also listed in the DEIS (pg. 4-61) as one of the mitigation measures to be implemented for the entire project.

Review of Supplemental Information

In Section 5.2 and throughout the DEIS, FERC makes numerous recommendations that plans, technical reports or other information (e.g., approved mitigation plans, results of consultation with various agencies, etc.) be submitted to FERC prior to the end of the DEIS comment period or prior to commencement of construction. EPA believes it would be more effective to have this additional information from the project proponent and FERC in advance of the FEIS, where possible, to allow adequate time for review and comment. The timing proposed in the DEIS for submission of additional information has the potential to result in a large amount of critical information being submitted just prior to or after the close of the comment period, which

could result in the public and reviewing agencies not having the opportunity or adequate time to review and comment.

Environmental Justice

The DEIS identifies minority populations along the project alignment within several counties in New York, Connecticut and Massachusetts. Work in these counties will range from new metering stations to pipeline installation and the establishment/upgrading of compressor stations. Identified impacts will range from short term construction related noise, air and traffic impacts to longer term noise and air impacts from operation of compressor and metering stations. The DEIS does a good job of identifying these impacts and construction mitigation measures to help address impacts to Environmental Justice (EJ) populations along the route. In general, we agree with the conclusion provided in the DEIS that the impacts to low income and minority populations along the route will not be disproportionate. However, we also encourage FERC to work to ensure that impacts to these populations are minimized to the extent possible through effective communication with affected communities.

An important component of project success is related to effective community engagement that fosters public understanding of the project and its impacts, and the range of solutions and steps to mitigate impacts. Based on our review of the DEIS, attendance at a public meeting hosted by FERC during the public comment period, and recent conversations with the proponent, we believe more could be done to engage and communicate with affected EJ populations along the project route for the balance of the NEPA process, during project permitting, and as the project moves into the construction and operation phase. In particular, we recommend a more robust public involvement strategy to inform and engage a broader spectrum of the EJ populations along the route about the types of work and impacts they can expect during project construction and operation. The strategy should provide higher quality, consistent, timely and appropriately targeted information such that it is clear and easily understood by a diverse audience.

During our recent conversations with the project proponent, we learned that efforts were made to contact affected communities early in the design and environmental review process. This is an important first step. Early and broad outreach into the community is critical to ensuring meaningful participation. Consideration of some non-traditional communication techniques may improve success in contacting some of the low income and minority communities along the project route. In those areas EPA continues to encourage the project proponent and FERC to consider reaching out directly to persons directly impacted and those indirectly impacted (in close proximity) to the work location throughout the balance of the environmental review/permitting process and during project construction and operation. Language access is a critical component for effective community engagement. A number of areas where project work is proposed have large Spanish-speaking populations that would benefit from targeted language-appropriate communication materials. To our knowledge the outreach materials prepared for the project to date (by the applicant and FERC) were not translated into any non-English languages. To correct this deficiency, we recommend that FERC require the project proponent to translate key materials to spoken languages in the EJ communities intersected by the project where there is a significant limited English proficiency. Our recent conversations with the project proponent confirmed a willingness to translate future project information summaries, notices of meetings

and construction notifications for distribution in targeted areas along the project corridor. We think this is an important additional step to fully inform affected EJ populations along the project route. We also encourage FERC to incorporate translated project information sheets into the public communication materials provided on the FERC website and at public meetings on the project.

In addition to language barriers that limit local engagement/participation in the environmental review, permitting and construction periods of the project, participation may be constrained by other factors. For example, our experience is that immigrant communities tend to participate less in public forums, so other methods of public outreach may be more effective. Going forward, FERC may want to consider communicating at ethnic focused/language sensitive small meetings in their neighborhoods; placing information in ethnic newsletters, newspapers and postings at local ethnic businesses; forwarding information to religious places and gathering spaces; producing public service announcements; agreeing to interviews on local access television; and identifying local leaders working in low income and minority neighborhoods who could facilitate feedback to FERC. Another essential and effective tool is attendance at preexisting community meetings. Finally, distributing information by going door-to-door with a community representative can also be extremely effective in making residents fully aware of a project's impact on a community.

EPA is willing to assist Algonquin and FERC to help improve the outreach to affected EJ populations along the project alignment. Please contact Deborah Brown of EPA's Environmental Justice program at 617-918-1706 for additional assistance with this outreach.

Blasting

More detailed information is needed regarding the potential impacts from proposed blasting in waterbodies, as well as more information on practicable alternatives to blasting. FEIS should more clearly and definitively demonstrate that no adverse effects on water quality, fish and wildlife or other aquatic resources would result from blasting. In addition, we believe that mitigation for blasting should be discussed in greater detail. The FEIS should explain whether other mitigation measures, in addition to delayed and stemmed charges, can be implemented to reduce adverse impacts on aquatic resources. In particular, time of year restrictions on blasting activities may be necessary to protect sensitive aquatic species. In-stream monitoring may be necessary to assure no adverse impacts to the aquatic ecosystem.

Drinking Water Supply Impacts

As described in the DEIS, there are many wells (93 private and 1 public) in very close proximity to construction work areas. The DEIS presents a basic plan for remediating negative impacts to wells from construction activities, but it does not present a plan for mitigating or preventing these impacts in the first place. On the remediation of negative impacts, the DEIS says: "Algonquin would contact any landowner with water supply wells within 150 feet of the construction workspace and offer to conduct pre- and post-construction monitoring of well yield and water quality. If a water supply well is damaged as a result of Project construction, Algonquin would ensure that a temporary source of water is provided until the damaged water

well is restored to its preconstruction capacity and quality, a replacement water source would be provided, or the landowner would be fairly compensated for damages." (pg. 4-34). This approach is commendable. Well owners would benefit from a more complete and detailed description in the FEIS of the process, e.g., what water quality parameters would be monitored, what type of replacement water would/could be provided, and how fair compensation for damages would be determined.

With respect to mitigating and preventing negative impacts to groundwater from construction, the DEIS says only, "Public and private water supply wells within 150 feet of the Project could be impacted by construction activities, including areas where blasting of bedrock would be required. These affects would be monitored and would be minimized by following the procedures outlined in Algonquin's Rock Removal Plan (see Appendix E)..." (pg. 4-34). However, Appendix E does not describe how these effects would be monitored and minimized, stating only that "...all necessary steps will be taken to protect existing conditions...." More specific steps should be outlined in the plan including but not limited to a plan to contact water supply well owners in advance of blasting, establish baseline conditions (for quantity, capacity and water quality) for each potentially affected well and specific protocols to direct follow-up to respond to reports of negative impacts from blasting. Blasting near bedrock wells poses a significant risk to the water quality and capacity of these wells. At a minimum, the FEIS should consider whether blasting bedrock within 150 feet of drinking water wells is reasonable and whether such an activity should be undertaken given the risk to water supplies. We recommend that alternatives to blasting be fully explored.

Air Quality

DEIS table 4.11.1-5, "Summary of Emissions Subject to General Conformity Review Associated with the AIM Project for 2015 – 2017," documents that emission estimates would not exceed general conformity applicability thresholds for all years of construction. Hence, general conformity is not triggered for the construction period. With respect to operation emissions that would be permitted, or otherwise covered by major or minor New Source Review (NSR) permitting programs, these emissions are not subject to the general conformity applicability.

DEIS section 4.11.1.3 "Air Emission Impacts and Mitigation," acknowledges that "New York and Connecticut developed standards to limit emissions from diesel engines through idling restrictions (i.e., 6 NYCRR Part 217-3, and RCSA § 22a-174-19). In addition, some of the states that would be affected by the Project have developed standards (e.g., 6 NYCRR Part 248 on diesel engine retrofitting) for other methods of reducing diesel emissions, such as the use of low sulfur diesel and advanced pollution control technologies." As we previously stated in our scoping comments and again in our comments on the ADEIS, EPA strongly recommends a commitment from Algonquin and corresponding condition by FERC to require a commitment to these types of measures during construction to help reduce and minimize the air quality impacts from the proposed project. These measures are not complicated to implement and they benefit residents in the project corridor during construction.

There are also many air pollution and climate benefits from this project that are not fully described in the DEIS. New England's electric system suffers from natural gas shortages during

winter months requiring the dispatch of more polluting oil units during those periods. Emissions of SO2 and NOx have been significantly higher during the previous several winters than the rest of the year, due to the inability of cleaner gas fired Electricity Generating Units (EGUs) to procure fuel. In addition, some states, particularly CT, have emphasized fuel switching in the residential sector from oil to gas heat as a greenhouse gas reduction strategy. EPA recommends that the FEIS say more about the potential air pollution and climate benefits associated with increased natural gas deliveries to the region.

Greenhouse Gas Emissions

In discussing greenhouse gas emissions, the DEIS compares the project's operating emissions to total estimated emissions from the New England region and states, "Although the GHG emissions appear large, the emissions are very small (0.4 percent) in comparison to the 2000 inventory of GHG emissions in the New England region of the United States of 224.01 metric tons of $CO2_e$ (NSCAUM, 2004)." Because global climate change is a result of disparate sources any of which may appear insignificant when compared to overall emissions, we recommend against comparing GHG emissions associated with a single project to those associated with the entire region.

We also recommend that FERC consider potential best management practices to reduce leakage of methane associated with operation of the pipeline; EPA has compiled useful information on technologies and practices that can help reduce methane emissions from natural gas systems.[1]

Cumulative/Indirect Effects

The DEIS states that FERC received numerous comments during scoping for the project about cumulative impacts associated with development of natural gas reserves (including hydraulic fracturing) in the Marcellus Shale region. In response to those comments, the DEIS states that because the extraction point of Marcellus Shale deposits is greater than 10 miles from project construction areas, air quality control regions and sub-watersheds crossed by the project, "…local resources that may be affected by Marcellus Shale development would not be affected by the Project, and local resources affected by the Project would not be affected by development in the Marcellus Shale region" and therefore "cumulative impacts associated with Marcellus Shale development are not discussed further" in the DEIS. Geographic proximity is not in and of itself the standard for NEPA's requirement to consider impacts that have a reasonably close causal relationship to the proposed federal action. We recommend that FERC reconsider this rationale and provide a more complete explanation in the FEIS.

Indian Point Nuclear Power Plant

The Entergy Hazard Analysis should be included in the FEIS. As FERC is aware, public interest in work that might affect the existing Indian Point Nuclear Power Plant is extremely high. The FEIS should fully consider any safety features and mitigation measures suggested by Entergy for the pipeline.

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[1]http://www.epa.gov/gasstar/index.html

Migratory Birds

The DEIS (pg. 4-112) discusses the Migratory Bird Treaty Act MOU between FERC and the United States Fish and Wildlife Service (FWS). The DEIS states that Algonquin should file reports of updated consultations with the FWS prior to the end of the FEIS comment period. While FERC requests that information so it can be provided in the FEIS, the MOU clearly states that FERC "…direct applicants…to jointly develop project-specific conservation measures with the FWS during the pre-filing process and/or the initial planning of projects…." Pre-filing is commonly understood to be the period before FERC begins the environmental process under NEPA. As an important element of the project, any mitigation plan for migratory birds should have been provided as part of the DEIS so that it is available for review by agencies and the public during the public comment period. The FEIS should include this information as well as a description of the status of coordination on this issue between FERC and the FWS.